Mycoplasma pulmonis Set
Concentrated liquid antigen produced in vitro with coordinating cell line control antigen

Catalog Number BR81018S

Synonyms: Mycoplasma pulmonis, M. pul

Product Description
M. pulmonis is a small bacterium that lacks a cell wall. It affects both mice and rats. Transmission is by aerosols, as well as from mother to child. Infection is typically outwardly asymptomatic, but infection with M. pulmonis can cause significant lung lesions. Clinical symptoms typically only manifest after chronic infection and include weight loss, hunched posture, and lethargy. In rats, staining around the nose and eyes may be observed.¹

Liquid antigen for M. pulmonis is produced in SP4 broth. Bacterial proteins are harvested from media and inactivated during processing.

This product has been tested in ELISA applications. When diluted sera is added to test wells coated with liquid antigen and control antigen, antibodies to M. pulmonis antigen will only bind in the antigen-coated wells. Labeled conjugate antibody will then allow for the detection of these antibodies through a chromogenic reaction with a substrate.

Reagent
Supplied as frozen liquid.

M. pulmonis antigen contains bacterial proteins in phosphate buffered saline.
Catalog No. BR81018

Control Antigen for M. pulmonis contains only SP4 broth.
Catalog No. BR81018C

Precautions and Disclaimer
This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

This product is not intended to be used as a diagnostic product.

Storage/Stability
Store in a non-cycling freezer at -60°C or below. Storage temperature of -80°C is preferable. Avoid repeated freezing and thawing, as product degradation may result. Coated plates can be sealed and frozen at -80°C ± 20°C for up to 6 months.

Procedure
Note: Recommended dilutions are provided on the lot specific Certificates of Analysis.

1. Dilute antigen in Coating Buffer at recommended dilution and plate 100 µL per well in odd-numbered columns of the Immunoassay plate.
2. Dilute control antigen in Coating Buffer at recommended dilution and plate 100 µL per well in even-numbered columns of the Immunoassay plate.
3. Cover the plate and incubate for 1 hour at 37°C.
4. Aspirate liquid from all wells and add Blocking Buffer at 100 µL per well.
5. Cover the plate and incubate for 10-30 minutes at 37°C.
6. Aspirate liquid from all wells.
7. Wash plate three times with wash buffer.
8. Dilute controls to appropriate working dilution.
9. Also prepare 1:50 dilutions of test samples.
10. Add 100 µL of diluted controls and diluted samples to appropriate wells.
11. Incubate the plate, covered, at 37°C for 1 hour.
12. Aspirate liquid from all wells.
13. Wash plate three times with wash buffer.
14. Add 100 µL per well of conjugate antibody diluted according to manufacturer’s recommendations.
15. Incubate the plate, covered, at 37°C for 1 hour.
16. Aspirate liquid from all wells.
17. Wash plate three times with wash buffer.
18. Add 100 µL per well of chromogen substrate according to the manufacturer’s recommendations.
19. Read the plate after the positive control reaches the desired net OD value.
Note: In order to obtain best results in different techniques and preparations we recommend determining cut-off values through the evaluation of known negative and positive samples.

Recommended Reagents

- **Coating Buffer**: Carbonate/bicarbonate buffer (0.035 M NaHCO₃; 0.016 M Na₂CO₃)
- **Plate Type**: Immulon 1B Flat Bottom 96-well Immunoassay Plate
- **Blocking Buffer**: Superblock Blocking Buffer in TBS (Thermo Scientific)
- **Wash Buffer**: 0.15 M NaCl in Reagent Grade/Distilled H₂O + 0.2% TWEEN® 20
- **Conjugate Antibody**: Goat Anti-Rodent (appropriate species) IgG-Peroxidase

References


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